06.01-10/17/01-00579

Reisch, Tim A. (EFDLANT)

om: Reisch, Tim A. (EFDLANT)
ent: Wednesday, October 17, 2001 12:01 PM
To: 'Stroud.Robert@epamail.epa.gov'
Cc: Harlow, Jeffrey (PWCNORVA); Jack Robinson (E-mail); Jayanti A. /WDC Sachdev (E-mail); Steve Mihalko (E-mail); Reisch, Tim A. (EFDLANT)
Subject: RE: DD comments 11, 16, et al.

transcri.pdf

Bob,
Good comments - I think the information proposed for the responses makes this a better document. I've included your comments, and the proposed responses below. If you would like the entire revised document let me know. Jayanti is out of town, but will be ready to finalize and send to reproduction, after you're approval and Jeff gets the CO to sign the Declaration.

Let me know if these responses address the underlying concern/issues. If acceptable, I'll have Jayanti prepare several copies to take to Jeff for the CO's signature - one original will be sent to each organization.

There is a pagination difference in the Word document sent and when opened in WordPerfect, as the page numbers differ. This doesn't present a problem except for Comment #1, which we assume applies to SWMU 22, Section 2.5.7.

(COMMENT 1) - Page 2 -11, last paragraph Phase I RFI. "Why no evaluation of soils for possible human health risk".

esponse: Surface soils were not sampled during the Phase I RFI, and was not identified as a data gap during the review of the document and the scoping of the work for the Phase II and Phase III RFIs. However, soil samples were collect in 1999 as part of the ERA conducted for this site. The Navy compared these soils sampling data to residential RBCs. The result of this comparison/evaluation is contained in Section 2.7.5 (also see Response to Comment # 4). The Navy proposes no text changes to this section.

(COMMENT 2) - Page 2- 12, last paragraph, Section 2.6. "What are the current and reasonably anticipated land uses of the areas comprising the six SWMUs.

Response: This information has been incorporated into Section 2.6; the revised text is provided as follows:

2.6 Current and Potential Future Site and Resource Uses

NAS Oceana consists of approximately 6,000 acres within the City of Virginia Beach. NAS Oceana is located in the Tidewater region of Virginia and lies southeast of the City of Norfolk, immediately west of the Atlantic Ocean, and just south of the Chesapeake Bay.

More than 40 percent of the base is urbanized, including commercial, residential, and operations buildings; and runways, hangars, and similar structures. The base's undeveloped areas consist of farmland, open land, forest, and wetlands. Farmland, which comprises approximately 925 acres, is farmed by private producers under the Navy's agricultural outlease program. Major crops grown within the boundaries of the base are corn, soybeans, and winter wheat. Approximately 200 acres of open fields and meadows, and 600 acres of forest occur on NAS Oceana. The base's forested areas are dominated by pine, mixed pine-hardwood, and hardwood stands.

Wetlands comprise approximately 660 acres of the undeveloped areas. The U.S. Fish and ildlife Service's (USFWS's) National Wetland Inventory (NWI) maps classify wetlands as alustrine emergent, palustrine scrub/ shrub, and palustrine forested. However, onsite observations by a CH2M HILL ecologist during a 1992 site visit suggest that the NWI maps

may underestimate the amount of forested wetlands on the base.

2.6.1 SWMU 11 - Fire-Fighting Training Area
SWMU 11 consists of two fire-fighting training rings and their immediate surroundings. The site is on the northwestern side of NAS Oceana at the intersection of two abandoned runways. The current land use is classified as "Vegetation/Open" in the latest basewide planning document, Master Plan, Master Jet Base, Naval Air Station Oceana, Virginia Beach, Virginia (LANTDIV, December 1986). The base is currently restoring abandoned runways and taxiways by crushing the pavement/concrete in place and placing soil over these areas to support vegetation. The Navy anticipates that this land use at this site will remain as Vegetation/Open in the future; no long range base development requirements have identified this site for development of any kind.

2.6.2 SWMU 16 - Pesticide Storage Area
SWMU 16 consists of a pesticide storage area adjacent to the pesticide shop at Building 821 in the base's Public Works Compound. The current land use is classified as "Public Works Department" in the latest basewide planning document, Master Plan, Master Jet Base, Naval Air Station Oceana, Virginia Beach, Virginia (LANTDIV, December 1986). The Navy anticipates that the land use at this site will remain as the Public Works Compound in the future.

2.6.3 SWMU 16GC - Pesticide Storage Area, Golf Course Maintenance Shop
SWMU 16GC consists of the pesticide storage area at the Golf Course Maintenance Shop. The maintenance shop is still in use and is located within the NAS Oceana golf course. The current land use is classified as "Recreation" in the latest basewide planning document, Master Plan, Master Jet Base, Naval Air Station Oceana, Virginia Beach, Virginia (LANTDIV, December 1986). The Navy anticipates that the land use at this site will remain as Recreational, being part of the golf course, in the future.

2.6.4 SWMU 21 - Transformer Storage Yard, Building 530
SWMU 21 is located in the southwestern corner of the Public Works Transportation Yard, approximately 400 feet southeast of Building 830. The current land use is classified as "Public Works Department" in the latest basewide planning document, Master Plan, Master Jet Base, Naval Air Station Oceana, Virginia Beach, Virginia (LANTDIV, December 1986). The Navy anticipates that the land use at this site will remain as the Public Works Compound in the future.

2.6.5 SWMU 22 - Construction Debris Landfill
SWMU 22 is approximately 600 to 1,000 feet west of Oceana Boulevard and 1,500 feet north of the VACAPES complex. The current land use is classified as "Vegetation/Open" in the latest basewide planning document, Master Plan, Master Jet Base, Naval Air Station Oceana, Virginia Beach, Virginia (LANTDIV, December 1986). The Navy anticipates that this land use at this site will remain as Vegetation/Open in the future; no long range base development requirements have identified this site for development of any kind.

2.6.6 SWMU 26 - Fire-Fighting Training Area, Building 220
SWMU 26 consisted of a partially buried drum, or small tank, former was used for fire extinguisher training at the base's fire station. The current land use is classified as "Maintenance/Production" in the latest base wide planning document, Master Plan, Master Jet Base, Naval Air Station Oceana, Virginia Beach, Virginia (LANTDIV, December 1986). The Navy anticipates that the land use at this site will remain as the base's fire station within the Maintenance/Production land use classification in the future.

(COMMENT 3) - Page 2- 15, Section 2.7.3, Human health risk assessment. "Need to evaluate all exposure routes otherwise institutional controls would be needed. What about residential RBC's.

Response: This information has been incorporated into Section 2.7.3; the revised text is provided as follows:

2.7.3 SWMU 16GC - Pesticide Storage Area, Golf Course Maintenance Shop

An evaluation of risk to human health was conducted as part of the Phase I RFI. The SWMU as a whole also was evaluated for ecological risk. Results are summarized below.

Human Health Risk Assessment
The Phase I RFI soil maximum detected concentrations were compared to RCRA action levels to determine COPCs. RCRA action levels are based on noncarcinogenic effects. All detected concentrations were well below the proposed RCRA action levels. No human health standards

were available for chlorpyrifos (organopesticide), dicamba (herbicide), copper, or lead. The maximum concentrations of these constituents were compared to EPA Region III risk based concentrations (RBCs). The maximum concentration of chlorpyrifos (1.2 mg/kg), dicamba (0.051 mg/kg), and copper (10.8 mg/kg) are below their residential RBCs of 230 mg/kg, 2,300 mg/kg, and 3,100 mg/kg, respectively. There is no RBC for lead, however the maximum concentration of lead (22.1 mg/kg) is below 400 mg/kg, the USEPA residential child screening level (OSWER Directive #9200.4-27P, December 1996).
The Phase I RFI concluded that the contaminants detected during the investigation of SWMU 16GC were at such low concentrations that the site does not pose an unacceptable risk to human health. Therefore, no remedial action was recommended.

(COMMENT 4) - Page 2 -16, Section 2.7.5, Human health risk assessment. " what about soil contamination".

Response: This information has been incorporated into Section 2.7.5; the revised text is provided as follows:

2.7.5 SWMU 22 - Construction Debris Landfill

An evaluation of risk to human health was conducted as part of the Phase I RFI. An additional evaluation of risk to human health from surface soil collected as part of the ecological risk assessment in December 1999 was conducted at a later date, as documented below. The SWMU as a whole also was evaluated for ecological risk. Results are summarized below.

Human Health Risk Assessment
During the Phase 1 RFI, inorganic constituents in groundwater were compared to MCLs. The comparison revealed no exceedances. The pesticide compounds detected in the sediment did not exceed National Oceanic and Atmospheric Administration (NOAA) guidelines. Inorganics in sediment and surface water were compared to RCRA action levels (based on noncarcinogenic effects) and MCLs, respectively. There were no exceedances of the RCRA action levels and MCLs.
As part of the ecological risk assessment, surface soil samples were collected. Therefore, constituents detected in the surface soil were evaluated to determine if site activities could adversely impact human health. This evaluation included the comparison of surface soil maximum detected concentrations to RBCs. This comparison revealed maximum detected concentrations for aluminum, arsenic, and iron at levels above residential soil RBCs. However, these constituents are not considered to be site-related and were detected at concentrations that are comparable to the background concentrations for Eastern United States (USGS, Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States, 1984). Therefore, as a result of this screening evaluation and the conclusions of the Phase 1 RFI, the concentrations detected at SWMU 22 do not pose unacceptable risks to human health above background levels. Therefore, no remedial action is recommended.

(COMMENT 5) - Page 2- 17, Section 2.7.6, Human health risk assessment. 3rd sentence, "What about the construction worker scenario". Second paragraph Human health risk assessment. "The comparison revealed no exceedances of the RBC's. "For residential, industrial etc.? Need to evaluate all exposure routes or need ICs.

Response: This information has been incorporated into Section 2.7.6; the revised text is provided as follows:

2.7.6 SWMU 26 - Fire-Fighting Training Area, Building 220

An evaluation of risk to human health was conducted as part of the Phases I and II RFIs. The SWMU as a whole also was evaluated for ecological risk. Results are summarized below.

Human Health Risk Assessment
During the Phase I RFI, the maximum detected concentrations of VOCs and metals in soil were compared to applicable human health criteria, including RCRA action levels or RBCs. No VOCs detected at SWMU 26 exceeded applicable human-health criteria. The maximum beryllium concentration in the soil (0.83 mg/kg) exceeded the health-based criterion for carcinogens (0.143 mg/kg) as well as the RCRA action level (0.20 mg/kg), which is based on noncarcinogenic effects. However, all beryllium concentrations were below the quantitative detection limit and all but one sample were below the average beryllium background concentration of 0.55 mg/kg in the eastern United States (Shacklette and Boerngen, 1984).

The maximum arsenic concentration in the soil (14 mg/kg) exceeded the carcinogenic RBC (3.8 mg/kg) for industrial soil. However, as with beryllium, all but one sample had concentrations of arsenic that were below the average arsenic background concentration of 8 mg/kg in the eastern United States (Shacklette and Boerngen, 1984).

No health-based criteria or RCRA action levels were available for detected PAHs; however, the detected concentrations were below the naphthalene RBC in residential soils.

TPH concentrations slightly exceeded the 100 mg/kg, the VDEQ storage tank guidance notification standard; however, this is a notification standard and is not driven by risk. There is no current risk-based level for TPH that can be used for determining potential impacts on human health. Additionally, all of the PAH constituents were detected at concentrations below human health levels, therefore, the overall risk is expected to be below acceptable levels.
During the Phase III RFI, the maximum detected concentrations of acetone and methylene chloride in soil were compared to the EPA Region III RBCs for the residential receptor. The comparison revealed no exceedances of the residential RBCs in any of the subsurface soil samples collected at SWMU 26 during the Phase III RFI.

Based on the Phase I and Phase III RFI assessments, the subsurface soil at SWMU 26 does not pose an unacceptable risk to human health, and no remedial action was recommended.

(COMMENT 6) - Page 3-1, Section 3.0, We need to summarize any questions that the RAB co-chair asked and provide responses in this section.

Response: This information has been incorporated into Section 3.0; the revised text is provide as follows:

3.0 Responsiveness Summary

As required by CERCLA ?117 and NCP ??300.430(f)(3)(i)(F) and 300.430(f)(5)(iii)(B), a public comment period, from August 13, 2001 to September 12, 2001, was conducted and a Public Meeting was held on August 16, 2001 to present the PRAP and answer any questions on the PRAP or any of the other documents in the information repository. The only participants in the Public Meeting were representatives from the Navy, EPA, and the NAS Oceana Restoration Advisory Board (RAB) co-chair.
Other than the questions asked during the public meeting by the RAB co-chair, no written or verbal public comments were received. The questions specific to the SWMUs documented in this DD pertained to the location of SWMU 22 and whether there is farming activity at the SWMU. The Navy clarified the location of the SWMU, and also clarified that farming activity is currently taking place at a different NAS Oceana SWMU, SWMU 25.

A copy of the certified transcript from the Public Meeting is included in Appendix A. This transcript also documents the public meeting (held on the same day) for NAS Oceana SWMUs 1, 15, and 24, and provides some information on SWMU 25, all of which will be documented in detail under separate DDs.

A copy of the entire transcript, provided in the attached file, will be in the Final DD as Appendix A.

Let me know if you have any questions.
Thanks - Tim

-----Original Message-----
From: Stroud.Robert@epamail.epa.gov
[mailto:Stroud.Robert@epamail.epa.gov]
Sent: Friday, October 12, 2001 12:55 PM
To: Reisch, Tim A. (EFDLANT)
Subject: DD comments 11, 16, et al.

Im, these are the EPA comments I sent them to Jayanti yesterday.

Robert W. Stroud
U.S. EPA Region III

Federal Facilities Branch
1650 Arch St.
Phila, PA 19103
`15) 814-3366
15) 814-3051 (FAX)
(410) 305-2748 Ft. Meade

----- Forwarded by Robert Stroud/R3/USEPA/US on 10/12/01 12:53 PM -----

Robert Stroud
10/11/01
05:07 PM

To: jsachdev@ch2m.com
cc:
Subject: DD comments 11, 16, et al.

Jayanti, these are EPA comments for the DD 11, 16 et. al. call me if you need to discuss also could you please forward to Tim and Steve.

Thanks,

Bob

Page 2 -11, last paragraph Phase I RFI. "Why no evaluation of soils for possible human health risk".

Page 2- 12, last paragraph, Section 2.6. "What are the current and reasonably anticipated land uses of the areas comprising the six SWMUs.

Page 2- 15, Section 2.7.3, Human health risk assessment. "Need to evaluate all exposure routes otherwise institutional controls would be eeded. What about residential RBC's.

Page 2 -16, Section 2.7.5, Human health risk assessment. " what about soil contamination".

Page 2- 17, Section 2.7.6, Human health risk assessment. 3rd sentence, "What about the construction worker scenario". Second paragraph Human health risk assessment. "The comparison revealed no exceedances of the RBC's. "For residential, industrial etc.? Need to evaluate all exposure routes or need ICs.

Page 3-1, Section 3.0, We need to summarize any questions that the RAB co-chair asked and provide responses in this section.

Robert W. Stroud
U.S. EPA Region III
Federal Facilities Branch
1650 Arch St.
Phila, PA 19103
(215) 814-3366
(215) 814-3051 (FAX)
(410) 305-2748 Ft. Meade